

OPPORTUNITIES AND CHALLENGES OF ASSESSMENT STRATEGIES IMPLEMENTED IN MATHEMATICS EDUCATION (A COMPARATIVE ANALYSIS BETWEEN ANNUAL AND SEMESTER SYSTEMS IN MASTER IN EDUCATION, NEPAL)

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ABSTRACT

The primary emphasis of the study is to compare different opportunities and challenges faced on assessment strategies in annual and semester systems in Mathematics Education in Tribhuvan University. A sample of 77 teachers in Kathmandu valley who were teaching Mathematics Education in master level and familiar with both system of formal education were selected as the sample of the study. The result of the study indicated that the semester system had more opportunities as well the challenges in comparison with the annual system of formal education regarding its assessment strategies.

KEYWORDS: Annual, Semester, Assessment, Opportunities & Challenges

Received: Oct 30, 2017; **Accepted:** Nov 20, 2017; **Published:** Dec 14, 2017; **Paper Id.:** IJESRDEC201716

INTRODUCTION

Higher education is the higher form of the formal education system in Nepal which plays the major role to formalize, structuralize and theorize the knowledge and its implication. The knowledge is disseminated and brought into practice by the universities by producing human power with proper qualification, skills and visions for the contemporary system of the society. Tribhuvan University, the oldest university (1959AD), is still the largest national university in Nepal. Among various core content areas of this college master degree in Education program was introduced by T.U. in 1961 AD. The faculty has been implementing Master Degree annual system program, in 13 specialization subject areas. And, for last 3 years, it has been implementing semester system in master degree in all faculties, including Mathematics Education from the central department of TU and recently from its constituent campuses in Kathmandu. The assessment system adapted in these two systems (Annual and Semester), of conducting the academic programme of higher level is also one of the determining factors of the assessment system's success. So, I planned to make some comparisons on the assessment system, within the subject of Mathematics Education between these two systems of Tribhuvan University.

Statement of the Problem

Annual system of higher education has been practiced, from the very beginning of the higher education of formal education in TU. Only for last 3 years, it has been practicing the semester system in Mathematics Education. In recent year, the enrollment of students in mathematics education is declining. So, with the hope of having more enrollments in mathematics education, the semester system in this discipline has been implemented in its other

constituent campuses as well. It is expected that the old annual education system will be replaced by the semester system with a competent performance. These two systems have their own characteristics and structures. Among various components of these two systems, the assessment strategy is also one of the indicators of the success in result percentage, quality and competition. So these two programs are compared and contrasted in terms of assessment strategies on the basis of the field data collected. Therefore, what challenges and opportunities are being faced in the adaptation of these two systems of formal education under the discipline of mathematics education is the main area of this study.

Objective of the Study

The study has the following objectives:

- To compare the challenges faced by the academicians on assessment strategies in annual and semester systems under the discipline of Mathematics Education in TU.
- To compare the opportunities provided by the assessment strategies in annual and semester systems under the discipline of Mathematics Education in TU.
- To suggest the preference of the either systems to the concerned parties.

REVIEW OF LITERATURE

The University Education Commission of Pakistan in education system, in 1948 stated, "If we were to suggest a single reform in education, would be of examination." This view helps us to realize the importance of evaluation system to judge the degree of success of overall system. An annual system is a traditional method that gives students an ample chance of two years to understand and grasp concepts, and sit for a comprehensive exam of three/ four hours at the end of two years (Hashim, 2012).

Aggarwal (1997) argues that, only that system of education is good, which ensures effective learning. The criterion for success is effective learning. So, some precautions or some details about the semester system must be informed to the students before switching from annual to semester or from semester to quarter system so that they can get the chance to compare and contrast in between 'what they have' and 'what they are going to implement'.

According to Abro (2014), semester system provides opportunity for students to polish their selves, with great extent through the presentations, mid-term examinations, group discussions and submission of assignments etc with regular intervals.

Mazumdar (2010), compares semester system and annual system of higher education, in his seminar paper. According to the author, both the systems have merits and demerits. Annual is traditional system of education. Annual system covers more syllabuses at a stretch and compels the student to remember all this till the end of the year. In semester system, students get more advantages, engaging environment in semester system.

Accordingly, both the Ninth (1997-2002 AD) and the Tenth five year plans (2002-2007 AD) stated to introduce continuous evaluation system at the primary level. The Ninth Plan stated gradual implementation of the continuous evaluation system. The plan targeted to experimentally implement the liberal promotion policy to upgrade from grade one to three. Similarly, the Tenth Plan has programmed to introduce continuous assessment system up to grade five on the basis of pilot experiment and experience. It is clear from these contexts that the Ministry of Education planned eventually to

introduce continuous evaluation system nationwide in primary education which indicates that more or less the importance of the continuous assessment practices of the students which is one of the perspectives of the semester system but in the context of Nepal high stake testing is prominently dominated from the beginning of the formal education.

Research Design

The study was conducted within the framework of survey research design. The survey was conducted among 77 teachers who were teaching the students of M. Ed. in Mathematics Education in Kathmandu valley and familiar with both systems of formal education were considered as the sample of the study.

DATA COLLECTION AND ANALYSIS PROCEDURE

With permission from the sampled campuses and teachers in the department of Mathematics Education, the questionnaire was administered personally. And the responses of the respondents were considered as the data for the study. With the help of the different descriptive (frequencies) statistics, the data collected through the survey instrument were analyzed.

Analysis and Interpretation

Descriptive statistics (frequencies) was used primarily in the study for analysis and further interpretation of the data corresponding to the respective statements as:

Comparative Analysis of Assessment Strategies in Mathematics Education Between Annual System and Semester System Regarding the Opportunities

It was found that 97.4% of the sampled teacher argued that the assessment under semester system provides good grading criteria for the students. In the same way, it is found that 96.1% of the sampled teacher argued that the students can obtain better marks in the evaluation under semester system. The result showed that 88.3% of the sampled teacher argued that the semester system provides better understanding of concepts for the students and 92.2% of the sampled teachers argued that the academic goal is focused in the semester system. About 98.7% of the sampled teachers argued that students are busier in the semester system. In the same way, 98.5% of the sampled teachers argued that students are tested through different techniques in the semester system and 97.4% of the sampled teachers argued that students have better presentation skills in the semester system. It is also obtained that 97.4% of the sampled teachers argued that students are continuously evaluated in the semester system. Similarly, 93.5% of the sampled teachers argued that semester system is better for learning. Finally, 98.7% of the sampled teachers found that semester system provides continuous feedback to the students. But 94.8% of the sampled teachers argued that evaluation process is comparatively easy to handle in the annual system.

Comparative Analysis of Assessment Strategies in Mathematics Education Between Annual System and Semester System Regarding the Challenges

It is obtained from the study that 83.1% of the sampled teachers argued that students are academically over burden in the semester system. Similarly, 70.1% of the sampled teachers argued that annual system has more chance of duplication of test paper. About 79.2% of the sampled teachers argued that annual system has more chance of not using the specification chart to construct the test paper and 92.2% of the sampled teachers argued that evaluation process is comparatively costly in the semester system.

CONCLUSIONS

On the basis of the analysis and interpretation of the data as in the previous section, the following findings were obtained. The semester system of examination provides the good grading criteria. Students can obtain better marks in the examination under semester system. Academic goal is focused in the semester system. Students are busier in the semester system. Students are tested through different techniques in the semester system. Students have better presentation skills in the semester system. Students are continuously evaluated in the semester system. Semester system allows continuous engagement between students and teachers. Semester system provides continuous feedback to the students. Semester system has more chances of favoritism and biases of teachers while evaluating the students. Annual system has more chance of duplication of test paper. Evaluation process is comparatively easy to handle in the annual system. Evaluation process is comparatively costly in the semester system. Above findings suggest that semester system is much more preferable for better academic performances.

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